GLANFORD BRIGG RURAL DISTRICT COUNCIL

HEALTH
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ANNUAL REPORT

OF THE

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MEDICAL OFFICER OF HEALTH

1957

THE GLANFORD BRIGG RURAL DISTRICT COUNCIL

PUBLIC HEALTH DEPARTMENT

Acting Medical Officer of Health (till 31st March, 1957)
J. H. Willis, M.B., B.S.

Medical Officer of Health (Commenced 1.4.57)
J.S. Robertson, M.B., Ch.B., M.R.C.S., L.R.C.P., D.P.H., D.I.H.

Chief Public Health Inspector
Malcolm H. McIntosh, A.M.I.S.E., M.S.I.A.
Public Health Inspectors:
T. Kerr.
G.H. Smith.

The Public Health Committee 1957.

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Vice-Chairman - Councillor F.T. Hepworth.

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The Public Health Department,
50, Holydyke,
Barton-on-Humber.

To the Members of the Health Committee of the
Glanford Brigg Rural District Council.

Mr. Chairman, Ladies and Gentlemen,

Although I prepared the Annual Report for last year this is the first one relating to the period since I took office. I take this opportunity to thank the Council for the honour they did me in appointing me Medical Officer of Health; for their kindness, and for the tolerance they have exhibited during the period when I was learning about the district and duties.

In establishing a new office one encounters many snags, and it may be some time before all of these are ironed out. The absence of Ministry circulars from previous years and other essential records is a handicap which will gradually be overcome. The isolation of my office from those of all three district councils presents problems which are accentuated by the fact that my office can only be manned part time. In spite of these handicaps however, there has been a steady improvement in the effectiveness of the office.

Since the statutory responsibilities of a district council are related to environmental health services the greater part of this report will be devoted to this aspect of Public Health. Although in recent years more stress has been placed upon the personal health services it should be remembered that the environmental services are in many ways more important. Apart from health education and immunisation against specific diseases, much of the work of the personal health services is concerned with early recognition of departures from normality and the minimising of the effects of defects encountered. Good environmental services on the other hand aim at preventing the development of disease and so reducing the load on the "personal health services" and on the "national ill-health service" provided by the hospitals and general practitioners.

In recent years a concept has been developing of "positive health" as opposed to the mere absence of disease. Although the World Health Organisation made a valiant attempt, no one has yet produced a satisfactory definition of "positive health". This does not detract from the desirability of trying to bring this ideal of physical, mental and social well-being within reach of as many people as possible. Perfect health is beyond the reach of some people by reason of their genetic constitution. It is not as yet possible to prevent some inherited diseases, although the exercise now of care in the handling and disposal of radioactive substances can materially reduce the risk of an increase in their incidence in future generations. Fortunately most people are genetically capable of achieving health, and whether they achieve it or not is determined by their physical and emotional environments throughout life. The physical environment is the direct concern of this Council, and the emotional environment is in many ways conditioned by the physical environment. Overcrowded or bad living conditions may so overburden a woman that she is too tired or bad tempered to make a good mother or wife, and the ill effects of the resulting bad personal relationships may last for a generation or more. Physical diseases from unsatisfactory environmental conditions also cause mental stress within the home with equally serious results. Our aim however should not be merely to eliminate the causes of disease when these become apparent, we should seek actively to promote health.

In order to achieve good health the following conditions are necessary in additional to a favourable genetic constitution :-

1. An adequate and balanced diet of food which is free from noxious chemicals, harmful bacteria and parasites.
2. A plentiful supply of wholesome water, free from bacteria protozoa and harmful chemicals, but which should contain certain trace elements.
3. An atmosphere free from harmful pollutants.
4. Good housing or living conditions with no overcrowding.
5. A "climate" either external or internal suited to the needs of the body. The body can only remain healthy when the temperature and humidity of the surrounding structures and air fall within certain limits. Thus in a cold climate there is a need for adequate heating and possibly humidification of the air within the house and place of work.

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6. Good working conditions and a satisfactory job within, but not too far below the individuals capacity.
7. Good personal relationships both at home and at work.
8. An environment free from disease carrying insects, animals harmful chemicals and ionising radiation.
9. Prompt and adequate treatment of any disease, injury or defect at the earliest possible stage.
10. Good personal habits - to include the taking of adequate sleep, personal cleanliness and abstention from excesses of food, drink and tobacco.

This list does not purport to be comprehensive and you may well feel that other conditions might be added. It does however include all the principal requirements, and most of the other requirements are either implied by or should result from them.

Of these requirements number 2,3,4 and 8 and in part nos. 1 and 6 are the direct responsibility of this council. Many of the others are influenced by these and other factors under the Council's jurisdiction.

I propose to deal in turn with each of those conditions and the ways in which this Council can assist in their promotion.

Condition 1. Food

This Council is directly responsible for ensuring the safety of food from bacterial and parasitic contamination.

The County Council, as Food and Drugs Authority is responsible for sampling for chemical analysis and the detection of adulteration. Most food borne disease is however due to bacterial contamination or parasitic infestation, and the role of the district Council is extremely important.

By ensuring a 100% meat inspection service and actively enforcing the Food Hygiene Regulations we can do a great deal towards reducing this side of food borne disease. These measures in themselves however are not adequate, and it is necessary to raise the hygiene standards of all food handlers, both in the trade and in private households.

In addition to these measures it is important that less obvious measures be adopted. I was recently told that it is not unknown for meat condemned as unfit for human consumption to be given to dogs to eat, in the raw state. This is an extremely dangerous practice which we must endeavour to prevent in future. Some of the meat condemned has been declared unfit because it contains the cysts of tape worms. Since the life cycles of the different worms are quite dissimilar I choose, as an example of the danger of feeding dogs with this meat, the worm T. Echinococcus. The cystic form of this worm is found in the livers of slaughtered animals. A liver condemned on account of the presence of one of the cysts, known as "hydatid cysts" because each one contains daughter cysts containing many thousand of Scolices, if eaten by a dog will result in the dog developing tape worms. As a result each time the dog passes a motion it will liberate thousands of "ova", and any animal eating grass so contaminated will in turn develop hydatid cysts, which will result in the condemnation of further meat. In addition there is a risk of human food becoming contaminated with ova from dog faeces. This would result in a serious, and sometimes fatal illness due to hydatid disease of the human victim.

A similar case, differing only in details, could be made out based upon some of the other worms. Since dogs have a habit of sniffing at each other and at each others droppings the nose of any dog may carry tape worm ova. Surveys have shown that 70 per cent of dogs are infested with some form of bowel parasite, and one dog in three has a tape worm. It is therefore most desirable that, by means of health education the public be discouraged from taking dogs into food shops or allowing them near food, in addition to the efforts which we should make to ensure that condemned meat is not fed uncooked to dogs.

The actual provision of an adequate and balanced diet for each household is the responsibility of the housewife. The sort of diet which she provides depends partly upon tradition, partly upon her education, and partly upon the amount of money available, the cost and the availability of food. As a Council we may influence the family diet by means of health education. Since rent competes with diet for the available money the provision of houses at a low rental may assist the poorer families to obtain a better diet.

Although this was a big factor in Stockton-on-Tees before the war, it is doubtful if excessive rent is an important cause of poor nutrition today. If the diet is poor due to lack of money it is more likely hire purchase on the T.V. set than rent which is to blame.

The teaching in schools of such subjects as catering, dietetics, and household budgeting offers perhaps the greatest opportunity for advance in the next generation.

Water.

Although the Council provides a mains water supply to every parish, and most houses now have a piped supply there are still a number of houses without. Many of these are situated a long distance from the nearest main, and the provision of a piped supply to these is prevented by economic considerations.

Some of the existing water mains are not satisfactory, and in some areas discolouration of the water by rust is reported intermittently. In addition, occasional bacterial contamination has been reported. It is not easy to locate the causes of these troubles but efforts have been, and will in future be made to do so.

In general, the water provided from the Council's main is of a very good quality bacteriologically. The water is supplied by the North Lindsey Water Board and comes, in the main, from deep bores in the chalk at Barrow and Barton and a deep bore in the limestone at Winterton. The water, at source is clean, most samples being found free from bacteria. Owing to the excessive hardness of the water at source the Water Board are proposing to soften all water in future by the base-exchange process. The softening plant at the principal source is already in operation, having been completed during the past year. Work on installing similar equipment at the remaining two major sources has begun.

The softening plant acts by replacing the Calcium ions in the water by Sodium ions. If the water were completely softened it would be liable to dissolve lead from pipes. In order therefore to eliminate any risk of lead poisoning resulting a small quantity of hard water is mixed with the softened water prior to distribution.

After the softening process the water is treated with Chlorine, which destroys any germs which may be present. Since, during the winter months, several samples of the raw water contained bacteria this treatment is most necessary. Following one occasion when the fully treated water was found to contain bacteria it was discovered that a brief interruption of chlorination occurs when the cylinder is changed. Barrow pumping station has in consequence been equipped with a second set of connections so that no break in continuity of treatment need occur in future. It is to be hoped that similar provision will be made at the other two pumping stations in the near future.

From a chemical point of view the water in the public mains falls short of the ideal because it contains insufficient fluorine for the formation of good healthy decay resisting teeth. It has been shown that children from areas where the water contains about one part per million of fluorine have very much less trouble from decayed teeth than children from other areas. Children from areas with a fluorine content of 4 parts per million also have very healthy teeth, but with a mottled discolouration. Many places in America have started to add fluorine to their water and have in this way reduced the amount of decay to less than a half of the previous level. Demonstration areas at Watford, Kilmarnock, Anglesey and Andover are doing the same in this country in order to gain experience with the necessary equipment. Unfortunately, because at levels of 10 to 30 parts per million fluorine is harmful there has been considerable opposition to fluoridation. At the level of one part per million however fluoridation has been proved to be harmless to the body and beneficial to the teeth.

The Fluorine content of the water from Barton, Barrow and Winterton pumping station is very low indeed. It is probable that the addition of this substance, which is chemically similar to the chlorine we already add, would result in a reduction in the incidence of dental decay in the next generation to less than a half of that suffered by the past generation.

As soon as the litigation over the legality of fluoridation at Andover has been settled we should consider pressing the Water Board to introduce this process here.

Clean Air.

This is a subject in which interest has been growing recently. ith the introduction of the Clean Air Act, the duties of local uthorities in this direction have been increased. It is an interestng subject in which a great deal of research is required.

Even since the great "Smog" in London in 1952 which killed over ,000 people a great deal of work has been done to try to find out ow pollution is harmful and how its effects may be prevented. It ow seems probable that many of the short term effects, including Smog" deaths are the result of an increased concentration of ulphur oxides in the air. There may also be a relationship beween some of the hydrocarbon pollutants and cancer of the lung, lthough the major cause of this condition is probably cigarette moking.

The oxides of sulphur are acid. It appears that where an ndustry such as cement manufacture which emits alkaline grit is ituated in a polluted industrial zone the amount of respiratory isease is less than in the surrounding industrial area. Thus lthough the amount of pollution is greater the amount of respiratory isease is less in the "cement districts" on the Thames side then in he rest of the London area.

If this is so, then it may be wrong to take measures aimed at liminating visible smoke, since some of the smokeless fuels such as oke contain a greater proportion of sulphur than does coal.

I am pleased that the Council has decided to purchase quipment and investigate and measure the amount of pollution hroughout the area. This survey will take up to 10 years to omplete, but may prove of great value in controlling fresh ollution and in helping us to site new dwellings in the most avourable places.

Housing.

A great deal remains to be done before the housing conditions n this area can even be classed as satisfactory, and we must aim ven higher to make them good. At the present rate of building nd slum clearance it is probable that we are only just standing till, for

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houses will fall into disrepair at about the same rate. There appears to be no likelihood of making an appreciable reduction in the number of houses unfit for habitation which is assessed in the region of 800. The majority of the remaining houses in the area ar without water closets, hot water systems and bathrooms.

When considering the effect of housing conditions on health, we should not think in terms of the standards laid down by the Housing Acts, but should go right back to fundamentals and consider what are the ways in which housing effects health, and therefore what standard to aim for. A house is not just a place where a family may sleep, and eat protected from the elements, but it is, in addition the place of work of the housewife, a place of recreation and education for the children and a social centre for the whole family. If the housing conditions are unfavourable the family may be affected in a variety of ways. For example, in addition to the known and obvious effects of lack of space, overcrowding and poor ventilation in facilitating the spread of infective disease, these same conditions may lead to the members of the family spending time away from the home which would have been spent at home under more favourable circumstances. Thus the teenage girl may spend an undesirable amount of time with boy friends, the teenage boy may be more likely to get into bad company, and older members of the family may spend an undesirable amount of time in the more comfortable local public house Family ties may be weakened, not only in this way but also as a resul of the conflicts which result from overcrowding, when the activities of one member may interfere with those of another through lack of space.

A house which is not overcrowded, over-small and which is well ventilated, even one which would comply with all the points in the standard of fitness in the Housing Act may still predispose to either physical or mental ill health. As I have mentioned, a house which is badly designed, or lacking in modern conveniences places a greater burden of work upon the housewife, and this may result in her becomin fatigued and irritable, so upsetting the emotional adjustment of the children, and perhaps even causing disharmony with the husband. The layout of the house may be such as to render accidents likely; for instance narrow steep and dark staircases, cramped kitchens, badly placed doors and upstairs windows which open, having low sills and fasteners which a toddler can reach, may all result in serious accidents.

A house without hot and cold running water and bath and W.C. oes not encourage personal cleanliness, but even the provision of hese is not enough. Unless the W.C. is situated in the bathroom separate wash basin should be placed in the W.C. compartment, for nless this is done people will continue to omit the necessary and-wash following each visit to the toilet.

Apart from professional food handlers, how many people realise hat bacteria can readily pass through ordinary toilet paper, and ince hands which have just handled toilet paper next "pull the lug" realise that whoever "pulls the plug" next will pick up some f their predecessors germs. During recent years the incidence f dysentery has been rising steadily. It is a milder disease han it used to be but is spread in just the way described. In arlier days it was a fly born disease, but it is now almost always pread by direct or indirect personal contact.

If diseases such as this are to be prevented we want not only .C.'s with wash basin in the same compartment so that doorknobs do ot spread contamination, but also let us have Pedal operated W.C, lushing apparatus. We want this at home, at work, at school and t play. It will take many years to achieve, but unless someone ives a lead it will never come about. Is this not an opportunity or the Council to give a lead, at least by putting this provision n their own new houses?

With regard to heating, let us have houses which are warm all ver. The old way, of having an open fire in one room downstairs, hich sent most of its heat up the chimney and drew in cold draughts nder doors and windows should be discarded. Convecting fires apable of heating several rooms by means of ducted hot air, and apable of burning smokeless fuels, or closed stoves or even central eating might be considered. It is really uneconomic to build xpensive houses with many rooms most of which can only be used for leeping in at night since to keep warm the family must all crowd ogether round the fire in the living room and incur many of the enalties of overcrowding again. With the more efficient appliances f today the whole house can be heated more effectively and with ess fuel than the old open fire used to heat one room. With a ouse so heated John can do his home work undisturbed in his room hile someone else reads in theirs free from distraction while those ho wish to watch the television in the lounge.

Good housing can remove many irritations from family life, --

and bears little relation to housing which is merely satisfactory because it complies with the standard in the Housing Act. It must not be assumed however that the standard should exceed that in the Act in every way. We may often be able to permit relaxations. For instance, if a refrigerator is provided this is far more desirable than a pantry, and a pantry is no longer necessary. There is some evidence today that low humidity is more injurious than is a high humidity and consequently we may be right in turning a "blind eye" to evidence of damp walls, provided that heating arrangements are good. Dampness may well be more harmful to decorations and furnishings than to health.

If we are going to achieve even a reasonable standard of housing in the forseeable future and at not too great a cost it will be necessary not only to build more and better houses, but also to encourage owners to repair, modernise and improve existing houses. This means more than merely giving improvement grants, and should involve stimulating the demand for grants, loaning the money for the landlords part of the cost, and giving the full 50% grant wherever possible. A great deal might also be done by the Council purchasing and themselves improving property.

Climate.

The external climate is beyond control, but fortunately very temperate. The indoor "climate" has already been considered in connection with the heating of houses, and this is the only point where this Council's duties effect this factor.

Working Conditions.

Good working conditions are to a great extent ensured by the factories inspectorate, but the district council has a function here where mechancial power is not employed. In these days however the number of factories not employing mechanical power is small, and in most factories only section 7 of the Act, relating to sanitary conveniences is enforcable by the Council.

The importance of good working conditions upon the health of the community tends to be underestimated. A careful study of the Registrar General's Decennial Supplement on Occupational Mortality reveals that there are wide differences between the mortality figures for different occupations, and the comparisons between working men and their wives discloses that those differences are due more to occupational than social factors. A great deal of research will be required to disclose the causes of these differences, which cannot be explained simply on a basis of selection.

Investigation of these matters within the factories is likely to require all the efforts of Industrial Health teams and of the Factory Inspectorate, but the investigation of such factors in occupations not covered by the Factories Act lies in the province of the Public Health Service, and is a challenge which we shall have to take up in the future.

The difficult task of ensuring that each person finds a job suited to his or her abilities has barely been tackled so far. The Labour Exchanges do what they can, and the Youth Employment Service can make a valuable contribution, but the lack of information as to the exact requirements for success in each occupation militates against the success of both these agencies. This Council has no direct responsibility here, but by encouraging the introduction of suitable industry, and by proper selection of its own staff can play some little part.

Personal Relationships.

Although the Council cannot directly affect personal relationships, they can ensure conditions conducive to the development of good relationships, particularly by ensuring good housing, freedom from overcrowding, and adequate provision of bungalows for old people.

Pest Control, and control of noxious chemicals.

Diseases may be spread by a variety of insects and animals and few people realise the extent of the problem. Apart from the old, known, and now seldom seen diseaaes such as plague, spread by rat and flea, typhus spread by the body louse, malaria, yellow fever dengue and related diseases spread by mosquitoes, which are now confined to the less developed countries and warmer climates, there are a host of other diseases carried in like manner, some of which can, and do occur in this country. Many of the conditions which are now confined to the tropics used to occur here, and unless we control the creatures which carry them may again visit our island.

Many kinds of insects feed on human blood and in doing so may transfer infection from person to person. Flies and mosquitoes, tics, fleas and lice may and do all carry infection, and in addition to the classical diseases such as trypanosomiasis, onchocerciasis, scrub typhus and so on may transfer humbler infections. In England the head louse is not infrequently responsible for impetigo of scalp, and although we do not see tic born scrub typhus, cases of louping ill, which may often be mistaken for poliomyelitis have been reported - this disease being carried from sheep to man by tics. When it is possible to identify, cultivate and study the virus of homologous serum jaundice we may well find that its natural mode of spread is by means of one of these biting insects.

In addition to blood to blood transfer of disease, animals such as the rat and mouse and insects such as the house fly and blow fly may carry infection from filth to food and so cause food poisoning.

It will thus be seen how important is the service of pest control. We should aim at greatly extending its efficiency. The control of rats must be improved to further reduce the risk of trichiniasis, serious outbreaks of which occur in England from time to time. Control of flies will become more difficult as the proportion resistant to the chlorinated hydrocarbon insecticides increases. Here we would do well to emulate the Chinese. House Flies breed in dung and feed on our food, while Blow flies feed on dung and breed on our food. Control of both can be achieved by preventing them from gaining access to dung. By scrupulous cleanliness much can be achieved, and in China where every beast has a sack attached to its hind quarters to collect the droppings so they do not foul the roads, and all excrement is dug into the land promptly, flies, once a scourge, are a rarity. How many British farmers would be prepared to go to such lengths?

To return to more practicable measures, however, the storage of dung on or in concrete platforms and containers with a moat around to prevent pupation, the provision of adequate cover of soil to refuse tips, frequent road sweeping and refuse collection, and education of the public in public hygiene would make a significant contribution. All these measures are expensive but we should aim to do as much as we can afford.

With regard to chemical poisons the situation is not satisfactory. angerous poisons are now used to spray crops, and although operators pplying these sprays are protected by special equipment there is real danger to persons, particularly children who may enter these ields after spraying. The new organic phosphorus insecticides losely related to the deadly war "nerve gas", are absorbed through he intact skin and can cause death in a very short while and initro-ortho-cresol (DNOC) which is used both as a selective weed iller and as a winter spray for fruit trees can produce a fatal llness, if the dust left when the solution dries is disturbed and nhaled. Effective measures to prevent the entry of children to ields treated with these chemicals would be most desirable, although t is only fair to say that no cases of children dying from these auses have yet been reported.

Due to the increasing use of radioactive material, the disposal f waste of this nature will in time become a real problem. All ass exposure to radiation is harmful because it increases the utation rate. Since most mutations produce recessive genes the ffects are not likely to show themselves until the second or hird generation. We must realise this and not be misled into false sense of security.

Small quantities of radioactive materials may be discharged nto sewers, and satisfactory facilities for sewage disposal may be mportant.

Prompt Medical Treatment.

This factor is the concern of the National Health Service. ocal Authorities may help by educating the public, so that treatent is sought early.

Hygienic Habits

The inculcation of good habits of personal cleanliness, leeping, eating and so forth is primarily a matter of health ducation. Education however is more likely to be effective if dequate facilities for washing etc. are available in the home.

Until every house has a water closet, a wash hand basin in he same compartment, a bathroom and hot and cold running water we hould remain dissatisfied.

For this to be achieved we shall have to endeavour to install public sewers and sewage disposal plant in every parish. Since there are more than 30 parishes still lacking such provision this is a big task, which will take years to achieve.

In the pages which follow you will find an account of the progress made during 1957. I trust that the little I have written about what our aims should be, will, without disheartening you, prevent you viewing these achievements too complacently. There is a great deal still to do and it will take many years to achieve it.

1957

I am pleased to be able to report that the statistics for 1957 are favourable, and show an improvement upon those for the previous year. There has been a slight increase in population, and a considerable increase in the birth rate. The Stillbirth rate has come down slightly but is still above that for England and Wales. This is compensated for however by the phenomenally low Infant Mortality Rate of only 14.95. As a result the Perinatal Mortality Rate is reasonably close to that for England and Wales. The death rates both crude and corrected remain very low.

The only unfavourable trent discernable in these figures is the proportionately great increase in Illegitimate births during the year.

During the year a start was made on the slum clearance programme. Progress was limited by the rate at which new houses could be provided, and this will continue to be the limiting factor next year. Owing to the impending derequisitioning of ex-service hutted camps priority in rehousing must at present be given to those resident in such temporary housing.

Progress was made with Sewage schemes in the parish of Barrow-on-Humber and further schemes were put in hand for Burton Stather and Hibaldstow. The Messingham scheme was completed.

Water mains extensions were installed in Scawby, Barnetby, Winteringham, Barrow and Bonby parishes. Although these were classed as agricultural extensions they also served a considerable domestic need. The one at Scawby Brook served 19 houses and was almost entirely domestic.

With regard to infectious diseases the district was fortunate. Although neighbouring authorities had a considerable amount of poliomyelitis there were very few cases in this district. Apart from the usual biennial outbreak of measles the only notable events were the epidemic of Asian Influenza, and a small outbreak of Scarlet Fever at Kirton Lindsey.

Although one or two cases occurred during the Summer no outbreak resulted from these, and it was not until the schools reopened in September that the epidemic started. It then spread extremely rapidly, and affected school children predominantly. It would be hard to overestimate the importance of the schools as the means of transmitting this disease.

Many people wondered why action was not taken to close schools in order to control this epidemic, and I feel that a word of explanation is called for. It is true that by closing the schools the rate of spread of infection could have been greatly retarded. It would not, however, have stopped the epidemic which would have again increased magnitude when the schools reopened. Closure of schools would merely, therefore, have delayed the peak of the epidemic until later in the year.

The Asian influenza itself is a mild disease. Deaths are rarely due to the influenza virus, but do result from a secondary infection. The influenza virus damages the lining of the windpipes and germs find it easy to grow on these damaged tissues. Since the epidemic was occurring in the Autumn it seemed preferable to allow it to burn itself out before the advent of bad weather caused people to shut their windows and crowd round the fire for warmth. It is these latter habits which make it easier for germs to spread from one person to another in winter time. Had the peak of the epidemic been delayed until winter, by means of closing schools, the risk of secondary infection and consequently of serious complications and deaths would have been increased.

The epidemic was reflected in an increase in notifications of pneumonia, but very few deaths resulted. One interesting but unexplained feature was the greater incidence of vomiting as a symptom on the eastern side of the district as opposed to the west. Specimens of blood from patients in all parts of the district including those who suffered from vomiting and those who did not, all showed serological evidence of infection with the same strain of virus (A. Singapore 1957).

In retrospect, I am sure it was right not to take any action which might slow down this epidemic. Should a future epidemic of a more severe type, such as that of 1919, occur during late winter some action would be indicated. From this epidemic we have learnt that spread is far more rapid when the schools are open, and that vaccine cannot be produced quickly enough to be of value. No vaccine reached the district until after the peak of the epidemic had passed. Since the development of active immunity requires several weeks to develop, control by this means would not be possible unless temporary "passive" immunity could be given first by means of "Gamma Globulin" prepared from convalescent patients. If this were possible school closure in order to gain time for such prophylactic measures might prove well worth while. That the schools reopening, and not the temperature or humidity of the air was the major factor in the timing of the epidemic seems beyond serious question, for the weather was warm and often sunny during most of the period.

The outbreak of Scarlet Fever at Kirton Lindsey was of interest chiefly on account of the past history of this village. Records of notifications in previous years showed that, at any rate since 1953, prior to which records were not available, this village had had more epidemics of Scarlet Fever than anywhere else in the district.

Outbreaks had occurred in 1953, 1954, 1955, 1956 and July, 1957. The July outbreak had only consisted of 4 cases, but on October 24th a further outbreak started. Cases were notified every day or two until by 13th November there had been 15 cases. A nurse was therefore asked to visit the school and take throat swabs of children with sore or inflamed throats. Cases continued to occur, and on December 3rd when 3 cases were notified, bringing the total to 24, I visited the school, and took swabs of throats and noses of 33 children and their staff. I asked the head teacher to introduce certain measures to control the spread of infection. Although 11 children had haemolytic streptococci in their throats only those with heavy infections or with nasal infections were excluded from school. The practice of collecting pencils and similar materials from infants at the end of a class and issuing them when required again was discontinued, since children often suck or chew pencil ends. Of the 7 precautionary measures taken to control spread of infection I believe that the abolition of "communal" pencils and brushes was probably the most valuable.

Whether the outbreak would have stopped when it did in any case or whether measures controlled it, one cannot tell. From the date when they were introduced no further cases occurred amongst the school children, and the only other case which did occur was notified on 23rd December nearly three weeks later.

Although the investigations were pursued to discover if there was a "carrier" in the school none was found. From the beginning it had seemed unlikely that this was the explanation, since the first case in the October outbreak had also been the first case in the July outbreak. This suggested that two different strains of the germ had been responsible, and so indicated that a common source was unlikely.

Since Kirton Lindsey includes the only active R.A.F. Station in the Brigg Rural District, it may be that constantly moving population provides the means of importation of organisms.

I wish to thank all the other officers of the Council for their cooperation, and particularly Mr. McIntosh and his staff, I must also thank those of you who have read this far, for doing so, and apologise for having written such a long preface. I have written it partly to stimulate thought on your part, and partly to enable you to get to know how I think and perhaps even why I sometimes request you to take unpalatable action. It is easy to dismiss advice as idealistic but impracticable; but when account is taken of what may be the results of the alternative courses of action it may well become apparent that the action advocated will eventually prove most expedient. I hope that this, admittedly long, preface will provoke a wider view of Public Health. In many Universities the title "Public Health" has fallen into disuse, and the name "Social and Preventive Medicine" has been substituted. This title savours less of the Public Health Acts than does the old name, but is cumbersome. Let us therefore remember that the administration of Acts of Parliament is but a means by which we attempt to achieve our aim of actively promoting health.

I have the honour to be
Your obedient Servant

(Signed) J.S. Robertson.

General description of the district.

The Rural District of Glanford Brigg covers an area of about 136,595 acres, and includes 41 parishes. The population is 33,080 and is slowly increasing.

Although the main industry is agriculture, there are a number of industries in the district, including iron ore mines, chalk quarries, beet sugar manufacture, ship building and repairing, the manufacture of cement, bricks, artificial manure and poultry food, and the refining of oil. There are many other small industries. Many inhabitants of the district are employed in the Steelworks in the Borough of Scunthorpe and a large number are also employed at Immingham Docks.

Area of the district.	136,595 acres
Population of the district. (1957)	33,080
Number of inhabited houses.	10,436
Rateable value 1957/58.	£283,004.
Product of a penny rate. 1957/58.	£1,175.

VITAL STATISTICS.

	Glanford Brigg Rural District 1957	England & Wales. 1956.
Population (Mid-year)	33,080	44,667,000
Crude Birth Rate (per 1,000 pop)	16.13	15.7
Corrected Birth Rate (per 1,000 pop)	16.94	15.7
Stillbirth Rate (per 1,000 total births)	34.4	22.9
Infant Mortality Rate (per 1,000 live birth)	14.95	24
Neonatal Mortality Rate (per 1,000 live births)	11.2	16.8
Perinatal Mortality Rate (per 1,000 total births)	45.2	39.2
Crude Death Rate (per 1,000 pop)	9.83	11.7
Corrected Death Rate (per 1,000 pop)	10.4	11.7

The corrections are to take account of the differing age and sex structures of the populations in different districts so that the corrected rates for all districts will be comparable. They are made by applying a correcting factor supplied by the Registrar General to the crude rates. These factors, for this district for 1956, were 1.05 for births and 1.06 for deaths.

	Legitimate			Illegitimate			
	Male	Female	Total	Male	Female	Total	Total
Live Births	242	263	505	16	14	30	535
Stillbirths	9	9	18	1	-	1	19
Infant deaths under 1 year	4	3	7	1	-	1	8
Infant deaths under 4 weeks.	3	2	5	1	-	1	6
Deaths :	186 Male			139 Female			325 Total

= The perinatal mortality rate used here is derived as follows:

$$\frac{\text{Stillbirths + deaths of infants under 4 weeks of age}}{\text{Total Births (Live + Still)}} \times 1000$$

It therefore differs slightly from the rate used by the Registrar General based on deaths in the first week of life + still births.

CAUSES OF DEATH IN THE DISTRICT IN 1957.

This table gives the causes of death in accordance with the abbreviated list of 36 groups of the World Health Organisation Nomenclature Regulations, 1948.

Causes of Death.	Male	Female
1. Tuberculosis, respiratory.	1	-
2. Tuberculosis, other.	-	-
3. Syphilitic disease	1	-
4. Diphtheria.	-	-
5. Whooping Cough	-	-
6. Meningococcal infections.	-	-
7. Acute Poliomelitis.	-	-
8. Measles	-	-
9. Other infective and parasitic diseases	-	-
10. (Malignant neoplasm, stomach	6	3
11. (Malignant neoplasm, lung, bronchus	8	1
12. (Malignant neoplasm, breast.	-	5
13. (Malignant neoplasm, uterus.	-	3
14. (Other Malignant and Lympthatic neoplasms	24	16
15. Leukaemia, aleukaemia.	-	-
16. Diabetes	2	2
17. Vascular lesions of nervous system	13	21
18. Coronary disease, angina.	34	15
19. Hypertension with heart disease	2	6
20. Other heart diseases	27	24
21. Other circulatory diseases	7	4
22. Influenza.	3	2
23. Pneumonia.	5	7
24. Bronchitis.	13	3
25. Other diseases of the respiratory system.	4	1
26. Ulcer of stomach and duodenum	1	1
27. Gastritis, enteritis and diarrhoea.	-	-
28. Nephritis and nephrosis.	2	-
29. Hyperplasia of prostate.	4	-
30. Pregnancy, childbirth and abortion.	-	-
31. Congenital malformations	4	2
32. Other defined and ill-defined diseases	12	17
33. Motor vehicle accidents	8	2
34. All other accidents	5	4
35. Suicide.	-	-
36. Homicide and operations of war	-	-

Deaths	Male	Female	Both
Total:	186	139	325

@ Malignant Neoplasm means Cancer.

It will be seen that the major causes of death were:

Ref: No:	Diseases.	Number of Deaths.
18 - 20	Heart Diseases.	108
10 - 14	Cancer (all types)	66
17	Neurovascular diseases (Strokes)	34
24	Bronchitis.	16

Particulars of diphtheria immunisations, whooping cough immunisations, combined diphtheria and whooping cough immunisations, vaccinations and re-vaccinations carried out in the Glanford Brigg Rural District during 1957.

	Under five years of age at date of Immunisation	Between five and fourteen years of age at the date of immunisation	Boosting Doses.
Diphtheria Immunisations.	22	62	332.

	Under one.	One	Two	Three	Four	Total
Whooping Cough Immunisations (under five years)	2	5	1	2	1	11

	Under one	One	Two	Three	Four	Total
Combined Diphtheria and Whooping Cough Immunisations (under five years)	228	57	13	6	6	310

	Under One	1-4	5-14	15 or Over.	Total.
Vaccinations	117	18	7	24	166
Re-vaccinations.	-	2	5	22	29

Poliomyelitis Vaccination. Great progress has been made in vaccinating children against poliomyelitis with either British or Salk vaccine. The County Council has not been able to provide figures but it is hoped that all who are eligible will soon have been vaccinated.

B.C.G. Vaccination against tuberculosis has been done in the schools to those children aged 13 whose parents requested it, and who were found by skin testing to require it.

TABLE OF NOTIFICATIONS OF INFECTIOUS AND OTHER DISEASES - BY AGE GROUPS.

DISEASE	0+	1+	2+	3+	4+	5+	10+	15+	25+	45+	65+	N.K.	Total
Measles (exc.rubella)	7	29	28	22	41	193	19	3	2	-	-	5	349
Whooping Cough.	5	5	11	12	13	48	7	-	1	1	-	2	105
Scarlet Fever.	-	1	2	3	9	25	1	-	-	-	-	-	41
Ac. Poliomyelitis (P)	-	-	-	-	-	-	-	-	1	-	-	-	1
Ac. Poliomyelitis (N.P.)	-	-	-	-	-	-	-	-	-	-	-	-	-
Smallpox	-	-	-	-	-	-	-	-	-	-	-	-	-
Diphtheria.	-	-	-	-	-	-	-	-	-	-	-	-	-
Dysentry.	-	3	-	-	2	14	3	-	1	-	1	-	24
Meningococcal Infection	1	-	-	-	-	-	-	-	-	-	-	-	1
Ac. Pneumonia.	1	-	2	-	1	3	1	2	8	8	9	-	35
Ac. Encephalitis (Post-Inf)	-	-	-	-	-	-	-	-	-	-	-	-	-
Enteric Fever .	-	-	-	-	-	-	-	-	-	-	-	-	-
Paratyphoid Fever.	-	-	-	-	-	-	-	-	-	-	-	-	-
Erysipelas	-	-	-	-	-	-	-	-	-	1	-	-	1
Food Poisioning.	1	-	-	-	-	-	-	-	-	-	-	-	1
Tuberculosos Respiratiry.	-	-	1	-	-	-	2	-	2	1	1	1	8
Tuberculosis (Meninges & CNS	-	-	-	-	-	-	-	-	-	-	-	-	-
Tuberculosis Other.	-	-	-	-	-	-	1	-	-	-	-	-	1
Peurperal Pyrexia.	-	-	-	-	-	-	-	-	1	-	-	-	1
Total:	15	38	44	37	66	283	34	5	16	11	11	8	568

Food Poisoning.

1. (a) Food poisoning notifications (corrected) as returned to the Registrar General during 1957:

1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	Total
1	Nil	Nil	Nil	1

(b) Cases otherwise ascertained:

1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	Total
Nil	Nil	Nil	Nil	Nil

(c) Fatal cases:

1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	Total
Nil	Nil	Nil	Nil	Nil

2. Particulars of out-breaks.

(a) Outbreaks due to an identified agent - Nil
(b) Outbreaks due to an agent not identified - Nil

3. Particulars of single cases.

(a) No. of cases due to an identified agent - ? 1 * (see footnot
(b) No. of cases due to an agent not identified - Nil

* One infection with Sal. Typhi Murium notified. No evidence as to whether it was food borne.

4. Salmonella infections, not food-borne.

(a) Salmonella (type): Typhi Murium
(b) No. of outbreaks: Nil.
(c) No. of single cases: ? 1 (see footnote).

(A child, suffering from Salmonella Typhi Murium infection, was transferred on January 5th from Scunthorpe War Memorial Hospita to the fever hospital (and notified). This child was normally resident in the Glanford Brigg Rural District. There is no evidence as to whether this infection was or was not food borne but as the child was only 3 months old milk would be the possible vehicle).

Water Supplies

Mains water services are provided in every parish. The water s provided by the North Lindsey Water Board, and comes from deep ores. Most of the water comes from sources in the chalk of the olds and is of good quality but is very hard. During the year oftening plant came into operation at one of the major sources.

A great many properties in the district are still not served by public main and rely upon private sources. Most of these are hallow wells and are most unsafe. A number are known to be seriously olluted, and efforts will have to be made to extend mains water ervices in the future.

Sewage Disposal.

Out of 41 parishes in the district only 7 have sewage disposal acilities, and of these the one at Winterton which employs land reatment is grossly inadequate. The sewering of Messingham was ompleted during the year, and work commenced upon the Barrow and ew Holland schemes.

Permission from the Ministry is awaited for the Goxhill scheme o proceed. It is desirable that this scheme be done in conjunction ith that at Barrow and New Holland since they share an outfall into he Humber.

Schemes for other parishes have been agreed in principle and ermission is awaited for these to proceed. Since the end of the ear a start has been made on the villages of Hibaldstow and Burton tather.

The village of Wootton has sewers which discharge into a isused chalk quarry only three miles from Barrow bore, the principal ource of drinking water for much of the district and half of Scunhorpe. The sewage here forms a small lake at the bottom of the uarry where it soaks away into the chalk. Although the evidence o far suggests that the chalk is filtering out the bacteria it is ndesirable to risk contamination of water supplied with untreated ewage. Some chemical poisons which may from time to time pass down ewers would not be removed by filtration through chalk. For these easons I consider that a scheme for disposing satisfactorily of the ewage for the village should be prepared as soon as possible.

With so many parishes requiring sewage disposal facilities it is bvious that a great deal of expense is bound to result. It may seem tempting to postpone doing some of this work in the hope of keeping down the rates. Since however costs rise year by year, and loan repayments are spread over many years, it is probable that the rates will remain lowest in those authorities who do these jobs earliest, notwithstanding high interest rates. We cannot afford to wait 30 years between schemes (so that one may be paid for before the next is commenced) but should proceed with them parish by parish as fast as the Ministry will permit.

This Council's record of achievement in this direction has, since the war, been good.

Milk.

This area is a "Specified" area under the Food and Drugs Act and Milk (Special Designations) Regulations. Consequently only pasteurised, Sterilised and Tuberculin tested milk may be sold.

Most of the milk in the district is therefore heat treated before consumption and the risk of milk borne infection is small. There is, of course, always an element of risk that infections such as undulant fever may be spread if a T.T. herd becomes infected, and there is also some risk of both tuberculosis and undulant fever to persons who live or work at farms and obtain milk which has not been treated.

When a sample of milk is found to contain either tubercle bacilli or Brucella abortus (the cause of undulant fever) the producer is warned of this danger.

Routine milk sampling is done by the County Public Health Inspector who notify me at once of any adverse findings.

Housing.

During the year the Council erected 70 houses. This number is of course quite inadequate for the needs of the area, but did enable the Council to make a start upon their slum clearance programme. Unfortunately the Council is hampered in many parts of the district by lack of sewage disposal systems, and this combined with government restrictions makes the provision of an adequate number of houses very difficult.

In providing new houses the Council has been concentrating upon traditional type houses of good design. It should be borne in mind however that the nations standards are continually rising. Fittings which seem normal today will appear antiquated in 40 years time. There would be much to be gained in the long run from the exercise of foresight in the equipping of houses built today in order to avoid the necessity of spending far more money later on adaptation.

Housing Act, 1949. Improvement Grants.

It is encouraging to note the increased interest in improving older houses, which is illustrated by the great increase in the number of houses subject to grant. This has gone up from 55 in 1956 to 105 in 1957.

It is the policy of the Council to give 50% grant in the case of owner occupiers, but only a 33⅓% grant to owners of houses which are let.

Since many property owners have for years been receiving an inadequate return as a result of the Rent Restrictions Acts, it might be agreed that their need of grant may be greater than of the owner occupier. Certainly an occupier has considerable incentive to make his house comfortable, and this does not apply to the landlord of tenanted property. The extension of the 50% grant to all might lead to even greater use of this Act. A further increase in effectiveness would follow if the Council adopted its powers under the Housing Act to loan to the owner the other half of the cost of improvement.

The number of unfit houses in the district far exceeds the number which can be dealt with by the resources of the Council in the next five years. Assuming an average life of 100 years per house, almost the complete building programme for a year is required to keep pase with obsolescence of existing houses.

~~with obsolescence of existing houses~~. For these reasons encouragement of all concerned to improve old property is necessary if a significant impact upon unsatisfactory housing conditions is to be made.

Report of work done by Sanitary Inspector for the Year 1957.

Total Number of New Houses erected during the year.

(A) By the Local Authority:	(a) Temporary	-
	(b) Permanent	70
(B) By other Local Authorities		2
(C) By other Bodies or Persons		-

1. Inspection of Dwelling Houses during the year.

(A) (a) Total number of dwellinghouses inspected for housing defects (under Public Health or Housing Acts)	162
(b) Number of Inspections made for the purpose ..	181

2. Remedy of Defects during the year without service of Formal Notice.

Number of defective dwelling houses rendered fit in consequence of informal action by the Local Authority of their Officers	60

3. Action under Statutory Powers during the year.

(A) Proceedings under Sections 9, 10 and 36 of the Housing Act, 1936:-

(a) Number of dwelling houses in respect of which notices were served requiring repairs	-
(b) Number of dwelling houses which were rendered fit after service of formal notice	-
(i) By Owners	-
(ii) By Local Authority in default of Owners ..	-

(B) Proceedings under Public Health Acts :-

(a) Number of dwelling houses in respect of which notices were served requiring defects to be remedied	-
(b) Number of dwelling houses in which defects were remedied after service of formal notices:-	
(i) By Owners	-
(ii) By Local Authority in default of Owners ..	-

(C) Proceedings under Sections 11 and 13 of the Housing Act, 1936 :-

(a) Number of dwelling houses in respect of which Demolition Orders were made	14
(b) Number of dwelling houses demolished in pursuance of Demolition Orders	1
(c) Number of dwelling houses subject to undertakings	-
Local Government Miscell. Prov. Act, 1953, Closing Order. ..	10

(D) Proceedings under Section 12 of the Housing Act, 1936 :-

(a) Number of separate tenements or underground rooms in respect of which Closing Orders were made ..	-
(b) Number of separate tenements or underground rooms in respect of which Closing Orders were determined, the tenement or room having been rendered fit ..	-

(E) Proceedings under Sections 25 and 26 :-

(a) Number of Clearance Orders made	-
(b) Number of dwelling houses demolished in pursuance thereof ..	-

4. Housing Act, 1936 - Part IV - Overcrowding.

(A) (a) Number of dwellings overcrowded at end of year.	Not known.
(b) Number of families dwelling therein	Not known.
(c) Number of persons dwelling therein	Not known.
(B) Number of new cases of overcrowding reported during the year	Not known.
(C) (a) Number of cases of overcrowding relieved during the year	Not known
(b) Number of persons concerned in such cases ..	Not known.
(D) Number of houses again overcrowded after being previously relieved	Not known.

Common Lodging Houses.

Numbered registered under Byelaws	-
Number of inspections made	-
Number of contraventions remedied	-
Number of contraventions of Byelaws	-

Hostels.

Number of inspections made	6
Number of irregularities	-
Number of irregularities remedied	-

Canal Boats used as Dwelling-Houses.

Number registered under Acts	-
Number of inspections	-
Number of contraventions of Regulations	-
Number of contraventions remedied	-

Movable Dwellings, Tents, Vans, &c.

Number of inspections during year	21
Number of nuisances therefrom abated	-
Number removed from district	-
Number of applications for licences granted	18

Bakehouses.

Number in district	4
Number of Underground Bakehouses	-
Number of Inspections	20
Contraventions of Factory Act	-
Defects remedied	2
Contraventions of Food and Drugs Act	2
Number of Notices served	-

Slaughter Houses.

Number on Register	18
Number of inspections	1275
Contraventions of Byelaws	-
Defects remedied	-

Milk and Dairies.

Number of Distributors on Register	101
Number of Dairies other than Dairy Farms on Register	4
Number of Inspections	127
Number of Contraventions of Regulations	-
Number of Contraventions of Regulations Remedied	-
Number of Dealers' Licences Issued	68
Number of Dealers' Supplementary Licences Issued	6
Number of Samples taken	-
Number of Samples found unsatisfactory	-

Unsound Food.

Carcases Inspected and Condemned.

	Cattle including Cows.	Calves.	Sheep and Lambs.	Pigs
Number killed (if known)	1965	3	5304	2041
Number inspected.	do.	do.	do.	do.
All diseases except Tuberculosis.				
Whole carcases condemned.	1	1	6	4
Carcases of which some part or organ was condemned.	305	-	93	37
Percentage of the number inspected affected with disease other than tuberculosis.	15%	-	1.7%	1.8%
Tuberculosis only.				
Whole carcases condemned.	-	-	-	-
Carcases of which some part or organ was condemned.	112	-	-	34
Percentage of the number inspected affected with tuberculosis.	5.7	-	-	1.6

Public Health Act, 1936 (Sec.89).

Number of Inns, Refreshment Houses, etc., visited	72
Number of defects found	3
Number of defects remedied	3

Food and Drugs Act, 1938.

1. Food Preparation other than Ice-cream.

Number of premises registered	27
Number of inspections	110
Number of irregularities found	2
Number of irregularities remedied	2

2. Ice-Cream.

Number of premises registered	99
Number of premises refused registration	-
Number of inspections	25
Number of irregularities found	-
Number of Samples taken:-	
(a) Satisfactory	-
(b) Unsatisfactory	-

Offensive Trades.

Number of premises in district	2
Number of inspections	12
Contravention of Bye-laws	-
Contraventions remedied	3

Shops Act, 1950.

Number of shops inspected	33
Number of defects found	-
Number of defects remedied	-

Water Supply.

Wells.

New sunk	-
Cleansed, repaired	-
Closed as polluted	2

Public Supply.

Percentage of houses supplied	83%
Area supplied	100%
New cisterns provided	-
Cisterns cleansed, repaired covered, etc.	-

Number of samples obtained for analysis.

(a) From Wells	33
(b) From public supply	6
Any insufficiency and where	-
Number of visits made	52

Public Health Act, 1936 (Sec. 58)

Number of inspections relating to dangerous structures.	18
Number removed	2
Number made safe	2

Drainage and Sewerage.

Number of visits made	1967

Closets.

Number of houses with privy vaults in district	18
Number of houses with pail closets in district	43% approx.
Number of pail closets substituted for privy vaults.	-
Number of pail closets repaired	6
Number of water closets substituted for dry receptacles.	103.
Number of houses with water closets in district.	57%
Number of water closets repaired.	-
Number of notices served	-

Drains.

Drains examined, tested, exposed, etc.	724
Drains unstopped, repaired, trapped, etc.	256
Waste pipes, rainwater pipes, disconnected, repaired	-
New soil pipes or ventilating shafts fixed	-
Drains reconstructed	45
Number of notices served	-

Sewers.

New Lengths of sewer laid	3
Number of open sewers cleansed	92
Lengths of open sewers cleansed	471 chains.

Tanks, Filter Beds. &c.

Alterations to sewage disposal works	-
Any inadequacy of sewage disposal works or complaints as to smells.	Yes at Winterton.

There is a serious lack of modern disposal arrangements in many parishes.

Cesspools.

Cesspools rendered impervious	-
Cesspools emptied, cleansed, etc.	98
Cesspools abolished	72

Disinfection.

Rooms disinfected :-	
(a) Ordinary infectious disease	6
(b) Tuberculosis	-
Rooms stripped and cleansed	-
Articles disinfected or destroyed	-
(a) Ordinary infectious disease	4
(b) Tuberculosis	-

House Refuse.

Number of visits made	342
Number of covered ashpits	-
Number of uncovered ashpits	-
Number of bins substituted for ashpits	-
Number of houses using bins	95%
Is refuse removed by householder or by public scavenger?	Direct Labour.
How frequently is refuse removed from each house	Fortnightly.
Number of complaints of non-removal	92
Methods of final disposal	Tipping.
Are existing arrangements for refuse removal satisfactory.	Yes.

NOTE: The Scavenging Scheme also includes the weekly emptying of Pail Closets in every Parish.

Nuisances.

Total number of nuisances during year :-

(1) Abated as a result of informal action by Sanitary Inspector.	27.

(2) Reported to Council :-

Statutory notice issued .. .. Nil.

Statutory notice not issued .. Nil.

Details of Nuisances Abated.

	After Informal Intimation	After Statutory Notice
Smoke	–	–
Accumulation of refuse	3	–
Foul ditches, ponds and stagnant water	4	–
Fowls, pigs and other animals ...	6	–
Dampness	10	–
Yards repaved or repaired ...	–	–
Other Nuisances	4	–

Rats and Mice Destruction.

Number of Rodent Operatives employed	1
Number of Premises treated	
(a) dwelling houses	278
(b) other premises	66

Are there any serious reservoirs or rats in district ? No.

FACTORIES ACTS, 1937 and 1948

Part I of the Act.

1. INSPECTIONS for purposes of provisions as to health (including inspections made by Sanitary Inspectors)

Premises.	M/c line No:	Number on Register	Number of			M/c line No:
			Inspections	Written notices	Occ'prs prosecuted.	
(1)	(2)	(3)	(4)	(5)	(6)	(7)
(i) Factories in which Sections 1, 2, 3, 4 and 6 are to be enforced by Local Authorities	1	7	8	–	–	–
(ii) Factories not included in (i) in which Section 7 is enforced by the Local Authority.	2	90	94	–	–	2
(iii) Other premises in which Section 7 is enforced by the Local Authority (excluding outworkers' premises.)	3	8	8	–	–	3
TOTAL:		105	110	–	–	

2. - CASES IN WHICH DEFECTS WERE FOUND

(If defects are discovered at the premises on two, three or more separate occasions they should be reckoned as two, three or more "cases").

Particulars	M/c line No.	Number of cases in which defects were found				No. of cases in which Prosecutions were instituted.	M/c line No.
		Found	Remedied	Referred To H.M. Insp.	Referred By H.M. Insp.		
Want of cleanliness (S.1)	4	2	2	-	-	-	4
Overcrowding (S.2)	5						5
Unreasonable temperature (S.3)	6						6
Inadequate ventilation (S.4)	7	-	-	-	-	-	7
Ineffective drainage of floors (S.6)	8						8
Sanitary Conveniences (S.7)							
(a) insufficient	9	1	1	-	-	-	9
(b) unsuitable or defective	10	1	1	-	-	-	10
(c) Not separate for sexes	11	-			-		11
Other offences against the Act (not including offences relating to Outwork)	12	-	-	-	-	-	12
TOTAL :	60	4	4	-	-	-	60